

REMARKS/ARGUMENTS

Applicant has cancelled claims 1-31, which were the subject of the Examiner's rejections under 35 USC § 103, discussed under Detailed Action by the Examiner, thus, making the Examiner's rejections moot, making individual arguments by the Applicant with respect to each of the Examiner's claim rejections unnecessary and unwarranted.

Applicant has amended claims 32-70 as previously submitted, which were the subject of the Examiner's claim rejections under 35 USC § 103, discussed under Detailed Action by the Examiner.

Applicant herein submits claims 71-82 as new claims.

Priority

Paragraph 5. The Examiner requested clarification of priority claims. This Application 09/556,439 incorporates in full the issued patent number 6,088,437. On page 1, line 7, *et seq.* of this Application, the following language appears:

"CROSS REFERENCE TO RELATED APPLICATIONS"

"The present document claims the benefit of the earlier filing date of, and contains subject matter related to that disclosed in, co-pending U.S. provisional application Serial No. 60/082,730 filed April 23, 1998, having common inventorship, **the entire contents of which being incorporated herein by reference.**" [Emphasis added.]

U.S. provisional application Serial No. 60/082,730 became the issued patent number 6,088,437. This application is entitled to priority due to the incorporation in full by reference of the previously issued patent.

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Specifications

Paragraphs 6 a and b. Applicant contends that it shall use only the United States Patent Number 6,088,437 and not use the patent application number 09/266,724.

Paragraph 6 c. Applicant agrees that the term "LATA" shall be construed as an acronym for "local access and transport area" relating to a geographical area designated
10 by a telephone company, typically defined by a particular area code.

Drawings

New corrected drawings are submitted herewith.

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Claim Rejections

The Examiner rejected previous Claims 32-70 as containing "subject matter which was not described in the specifications in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention."

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Applicant refers the Examiner to United States Patent Number 6,088,437, incorporated in full in this Application Number 09/556,439, hereinafter referred to as Amick Application, and the specifications contained therein, the entire contents of which have been incorporated into the *Amick* Application by reference. Claims 32-70, as

amended and submitted herein, use the terminology that was previously used and approved in United States Patent Number 6,088,437, hereinafter referred to as "*Amick* Patent." The issued *Amick* Patent dealt with the hardware of this invention and the *Amick* Application deals with the software to be used on that hardware.

5 Claims 32-70 amend the claims that were previously submitted as Claims 32-70 on April 20, 2005. Claims 1-31 have been cancelled previously. Claims 71-82 have been added.

Applicant requests that any previously filed unentered amendments not be entered.

10 Applicant requests that the Examiner contact the Applicant prior to the issuance of the next Office Action.

Amended drawings FIG. 1/10 replace the drawings that were previously submitted as drawings 1-10.

15 Applicant previously has cancelled claims 1-31 and replaced previously submitted claims 32-70 with claims 32-82 to define patentable subject matter more accurately and succinctly, and make the language thereof clearer.

Examiner's Paragraphs 12-15

20 The Examiner's objection of Applicant's use of overly broad and non-descriptive labels has been eliminated by substituting the terminology of the issued *Amick* Patent.

The examiner's objection that the functional, methodological steps were not set forth has been remedied by the replacement drawings 1-10. Similarly, the Examiner's objection that the specification was not clear enough has been remedied by a combination

of the specification in this *Amick* Application and the specification of the previously issued *Amick* Patent, "Call Processing System, Method and Computer Program Product."

This *Amick* Application incorporates the entire contents of the *Amick* Patent, as set forth on page 1, lines 7-11 of the *Amick* Application. The *Amick* Application is the software

5 that functions with the CALL PULL BACK mechanism in the *Amick* Patent.

Consequently, in the currently amended Claims 32-70 and new claims 71-82 submitted herewith, Applicant has used the terminology of the *Amick* Patent, with regard to the elements of the system, in order to more accurately and clearly set forth the operations of the system as set forth in the *Amick* Application. Applicant also uses the *Amick* Patent

10 terms to eliminate confusion or lack of clarity regarding the meaning of the terms, as well as to facilitate consistency between the *Amick* Patent and the *Amick* Application.

Inasmuch as the entire *Amick* Patent was incorporated into the *Amick* Application, the specification of the *Amick* Patent is also part of the specification of the *Amick* Application. This combined specification contains a written description of the invention
15 and the manner and process of making and using it, in full, clear, concise and exact terms as to enable any person skilled in the art to which it pertains (telephony), to make and use the same and sets forth the best mode contemplated by the Inventor of carrying out the invention.

20 Examiner's Paragraph 16

The Examiner's objection that the term "error condition" was too broad has been met by changing the term "absence of an error condition" to "no response from the at least one called party," in order to limit and define the condition.

Examiner's Paragraph 17

The Examiner's objection that the previously submitted claims reciting "at least one object comprising at least one first object" has been met by revising the language in the claims to use the terminology of the *Amick* Patent.

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Examiner's Paragraph 18

The Examiner's objection to the use of the term "at least one second client management system" has been resolved by using the terminology of the *Amick* Patent. Instead of using the term "client management system," the claims and drawings use the terminology of the *Amick* Patent, referring to the system as the "virtual network call processing system." As set forth in the *Amick* Patent, and this Application 09/556,439, it is one system used simultaneously by many clients.

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Examiner's Paragraph 19

The Examiner's objection to the use of the term "work place" has been met by eliminating that term and substituting the term "client's premise." With the virtual network call processing system, the client's premise can change to any location at any time and the virtual network call processing system follows the client so that his/her telephony system structure and function is fully operational at any or all of the physical locations of the client.

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Examiner's Paragraph 20

The Examiner's objection that Claim 45 and Claim 39 claim the same thing has been met by amending claims and/or adding new claims.

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Examiner's Paragraph 21

The Examiner's objection to the use of the term "mailbox" without a definition has been met by that revealed in the *Amick* Patent, wherein it is stated that callers may be forwarded to a receptor mailbox and that a mailbox may dial a telephone number and store e-mail as well as voice and fax messages.

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Examiner's Paragraph 22

The Examiner's objection to the use of the terminology "the at least one object manages recording" and "the at least one object manages erasing" has been noted. In the *Amick* Patent it is disclosed that an object is a well thought out preprogrammed and proven software construct that simplifies programming and ensures reliable operations. One of the operations is the recording and storage of e-mail as well as voice and fax messages and another operation is the erasure of those messages. These customer specific applications are created, manipulated and destroyed utilizing preprogrammed Objects/Software Constructs first disclosed in the *Amick* Patent, which were incorporated in full, and have been further described, in the *Amick* Application.

Examiner's Paragraph 23

The Examiner's objection that the system is not described sufficiently is met by viewing the entire system in light of both the *Amick* Application and the *Amick* Patent, which has been incorporated in full into the *Amick* Application.

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Comparison of Claims 32 through 82 with the *Fuller* Patents

Claim 32 (Previously Filed, Currently Amended)

Managing communications during an error condition is primarily addressed in the *Amick* Patent. A comparison of the fundamental differences between that disclosed in the *Amick* Patent and that disclosed in the *Fuller* patents, reveals that *Fuller* utilizes a precision busy/ring detector which only detects frequency and the *Amick* Patent utilizes both frequency and cadence detection without the need to train or tune the equipment to characterize signaling attributes of signals produced by one of a plurality of central office switches, each having a different frequency and cadence signal event characteristic.

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The only mention of an error condition in the *Amick* Application and the *Amick* Patent is in the section entitled "Object/Class of Service" documentation. In OBJ/COS 511 it is stated: "This Object also comes into play when the Call Processor portion of the [[Node]] POP or [[Hub]] NOCC doesn't know what else to do with the caller due to a software or ring cadence error."

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(a) The terms "Virtual Office Environment" and "Virtual Office Environment management system" have been changed to "virtual network call processing system," as set forth in the *Amick* Patent.

None of the *Fuller* patents discloses preprogrammed software constructs referred to as Objects in the *Amick* Application and the *Amick* Patent. Even if they did, by virtue of the fact that the *Amick* Application and the *Amick* Patent are creating one of a kind applications and utilizing frequency and cadence detection the Objects would not be
5 the same. These customer specific applications are created, manipulated and destroyed utilizing preprogrammed Objects/Software Constructs first disclosed in the *Amick* Patent, which were incorporated in full and are further described in the *Amick* Application.

(b) The *Amick* Patent discloses a method for detecting error conditions
10 without the need to train or tune the equipment to characterize signaling attributes of signals produced by a plurality of central office switches, each having a different frequency and cadence signal event characteristic. *Fuller* does not.

As stated by the examiner of the *Amick* Patent, under allowable subject matter the following is an examiner's statement of reasons for allowance: *Morganstein et*
15 *al* (U>S> Patent No. 4,809,321) teaches a call completion equipment for use with a switching system for assisting callers to complete telephone calls thereto wherein a primary destination telephone set is busy or does not answer. The equipment of *Morganstein* has a tone learn program capability (column 6, lines 24-27), the tone learning capability is required so that the call completion equipment may operate with the
20 particular switch that services a particular geographic region in which a PBX is located. However, with respect to claims 1-21 [of the *Amick* Patent], prior art of record fails to teach, or render obvious, alone or in combination, a virtual network call processing system and a method for processing calls in the virtual network call processing system

comprising a central office switch characterization mechanism that characterizes signaling attributes or signals produced by one of a plurality of central office switches, each having a different frequency and cadence signal event characteristic.

5 (c) Same as (b)

Claim 33 Currently Amended)

None of the *Fuller* patents discloses preprogrammed software constructs referred to as Objects in the *Amick* Application and the *Amick* Patent. Even if they did, by virtue
10 of the fact that the *Amick* Patent and the *Amick* Application are creating one of a kind applications and utilizing frequency and cadence detection the Objects would not be the same. These customer specific applications are created, manipulated and destroyed utilizing preprogrammed Objects/Software Constructs first disclosed in the *Amick* Patent, which were incorporated in full and are further described, in the *Amick* Application.

15 The term “menu” is like the term “Objects.” *Fuller* uses menus for making simple menu choices. The *Amick* Application uses menus as well as schedules, tables and plug in applications to create one of a kind multi level structural applications like that disclosed in the Object-Use Example in the body of the *Amick* Application. *Fuller* uses the term “objects” one time and he uses the term objects as in “objectives”: “The
20 illustrative examples which follow are intended only to clarify some of the concepts, features, and objects of the invention, and do not define the scope of the invention.”

Claim 34 (Currently Amended)

Managing communications during an error condition is primarily addressed in the *Amick* Patent. The fundamental differences between that disclosed in the *Amick* Patent and that disclosed in the *Fuller* patents are as follows: *Fuller* utilizes a precision
5 busy/ring detector which only detects frequency and the *Amick* Patent utilizes both frequency and cadence detection without the need to train or tune the equipment to characterize signaling attributes of signals produced by one of a plurality of central office switches, each having a different frequency and cadence signal event characteristic.

The only mention of an error condition that actually pertains to an error in the
10 *Amick* Application is in the section entitled "Object/Class of Service" documentation. In OBJ/COS 511, it is stated: "This Object also comes into play when the Call Processor portion of the [[Node]] POP or [[Hub]] NOCC doesn't know what else to do with the caller due to a software or ring cadence error."

15 Claim 35 (Currently Amended)

Both *Fuller* and the *Amick* Patent and Application use routing options for messaging and connecting to PSTN network addresses. However, in addition, the *Amick* Patent and Application use routing options to move from one Object or application to another Object or application and to move the caller to different pieces of equipment such
20 as an IVR (Integrated Response Unit).

Claims 36 and 37 (Currently Amended)

These claims have been changed to utilize the same terminology of “virtual network call processing system” as utilized in the *Amick* Patent.

5 Claim 38 (Currently Amended)

As stated previously, none of the *Fuller* patents uses Objects or preprogrammed Software Constructs and, if they did, by virtue of the fact that the *Amick* Patent and Application are creating one of a kind applications and utilizing frequency and cadence detection, the Objects would not be the same. These customer specific applications are
10 created, manipulated and destroyed utilizing preprogrammed Objects/Software Constructs first disclosed in the *Amick* Patent, which were incorporated in full, and are further described, in the *Amick* Application.

Claim 39 (Currently Amended)

15 After issuing the client’s trunk forwarding configuration instructions to the client’s telecommunications carrier effecting traffic at the client’s premise to route communications between the at least one calling party and the at least one called party virtual network call processing system application, the carrier’s programming then determines whether the all forward and or no answer forwarding effecting the traffic at
20 the client’s premise exists. This is not mentioned in *Fuller*.

Claim 40 (Currently Amended)

Language of Claim 40 has been changed to the language utilized in the *Amick* Patent.

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Claim 41 (Currently Amended)

This is utilized by both *Fuller* and *Amick*. However, as disclosed in the *Amick* Patent, *Amick* utilizes cadence detection without the drawback of having to tune or train the equipment hosting the Virtual Environment Applications so that it characterizes signaling attributes of signals produced by one of a plurality of central office switches, each having a different frequency and cadence signal event characteristic. *Fuller* does not do that.

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Claim 42 (Currently Amended)

Language of Claim 40 has been changed to that utilized in the *Amick* Patent.

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Claim 43 (Currently Amended)

Language of Claim 40 has been changed to that utilized in the *Amick* Patent. As previously stated, the *Amick* Application does not use the term “Virtual Office Management System.” The term “Virtual Environment Applications” is used instead. The *Amick* Patent utilizes cadence detection without the drawback of having to tune or train the equipment hosting the Virtual Environment Applications so that it characterizes signaling attributes of signals produced by one of a plurality of central office switches, each having a different frequency and cadence signal event characteristic. *Fuller* uses the

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term “menu” for making simple menu choices. The *Amick* Patent and Application use it as well as “schedules,” “tables” and “plug in applications” to create one of a kind multi level structural applications like that disclosed in the Object-Use Example of the body of the *Amick* Application.

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Claims 44, 45 and 46 (Currently Amended)

None of the *Fuller* patents discloses preprogrammed software constructs referred to as Objects in the *Amick* Application, and, if they did, by virtue of the fact that the *Amick* Patent and Application are creating one of a kind applications and utilizing frequency and cadence detection, the Objects would not be the same. These customer specific applications are created, manipulated and destroyed utilizing preprogrammed Objects/Software Constructs first disclosed in the *Amick* Patent, which were incorporated in full, and are further described, in the *Amick* Application.

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Claim 47 (Currently Amended)

None of the *Fuller* patents mentions the term “mailbox.”

15 Claims 48 and 49 (Currently Amended)

None of the *Fuller* patents discloses preprogrammed software constructs referred to as Objects as in *Amick* Application, and, if they did, by virtue of the fact that the *Amick* Patent and Application are creating one of a kind applications and utilizing frequency and cadence detection, the Objects would not be the same. These customer specific applications are created, manipulated and destroyed utilizing preprogrammed

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Objects/Software Constructs first disclosed in the *Amick* Patent, which were incorporated in full, and are further described, in the *Amick* Application.

None of the *Fuller* patents mentions the word “fax” or a “fax on demand” application.

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Claims 50, 51, 52, 53, 54, 55, 56, 57, 58 and 59 (Currently Amended)

None of the *Fuller* patents discloses preprogrammed Objects/Software Constructs referred to as Objects in the *Amick* Application and the *Amick* Patent, and, if they did, by virtue of the fact that the *Amick* Patent and Application are creating one of a kind applications and utilizing frequency and cadence detection, the Objects would not be the same. These customer specific applications are created, manipulated and destroyed utilizing preprogrammed Objects/Software Constructs first disclosed in the *Amick* Patent, which were incorporated in full, and are further described in *Amick* Application.

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Claim 60 (Currently Amended)

Managing communications during an error condition is primarily addressed in the *Amick* Patent. The fundamental differences between that disclosed in the *Amick* Patent and that disclosed in the *Fuller* patents are: *Fuller* utilizes a precision busy/ring detector which only detects frequency and the *Amick* Patent utilizes both frequency and cadence detection without the need to train or tune the equipment to characterize signaling attributes of signals produced by one of a plurality of central office switches, each having a different frequency and cadence signal event characteristic.

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The only mention of an error condition that actually pertains to an error in the Amick Application is in the section entitled "Object/Class of Service documentation." In OBJ/COS 511, it is stated: "This Object also comes into play when the Call Processor portion of the [[Node]] POP or [[Hub]] NOCC doesn't know what else to do with the
5 caller due to a software or ring cadence error."

(a) The language of claim 60 has been changed to that utilized in the *Amick* Patent. None of the *Fuller* patents discloses preprogrammed Objects/Software Constructs referred to as Objects as in the *Amick* Application and the *Amick* Patent, and,
10 if they did, by virtue of the fact that the *Amick* Patent and Application are creating one of a kind applications and utilizing frequency and cadence detection, the Objects would not be the same. These customer specific applications are created, manipulated and destroyed utilizing preprogrammed Objects/Software Constructs first disclosed in the *Amick* Patent, which were incorporated in full, and are further described, in the *Amick*
15 Patent.

The terms "Virtual Office Environment" and "Virtual Office Environment management system" have been changed to "Virtual Network Call Processing System," as set forth in the *Amick* Patent.

20 (b) *Fuller* does not address the issuing of forwarding configuration instructions to telecommunications carriers instructing them to utilize all forward and or no answer forwarding effecting traffic at a client's premise to route communications between the calling party and the called party application;

(c) Same as (b).

Claim 61 (Currently Amended)

None of the *Fuller* patents discloses preprogrammed Objects/Software Constructs
5 referred to as Objects in the *Amick* Application and the *Amick* Patent, and, if they did, by
virtue of the fact that the *Amick* Patent and Application are creating one of a kind
applications and utilizing frequency and cadence detection, the Objects would not be the
same. These customer specific applications are created, manipulated and destroyed
utilizing preprogrammed Objects/Software Constructs first disclosed in the *Amick* Patent,
10 which were incorporated in full, and are further described, in the *Amick* Application. The
functionality of these Objects/Software Constructs is disclosed in the specific features
and functionality of each object in Objects Table 11-64.

Claim 62 (Currently Amended)

15 Managing communications during a called party no error condition is primarily
addressed in the *Amick* Patent. The fundamental differences between that disclosed in the
Amick Patent and that disclosed in the *Fuller* patents are: *Fuller* utilizes a precision
busy/ring detector which only detects frequency and the *Amick* Patent and Application
utilize both frequency and cadence detection without the need to train or tune the
20 equipment to characterize signaling attributes of signals produced by one of a plurality of
central office switches, each having a different frequency and cadence signal event
characteristic.

Claims 63, 64, 65, 66, 67, 68, 69, 70 (Currently Amended) and 71, 72, 73, 74, 75, 76, 77,
78, 79, 80, 81 and 82 (New)

None of the *Fuller* patents discloses preprogrammed Objects/Software Constructs referred to as Objects in the *Amick* Application and the *Amick* Patent, and, if they did, by
5 virtue of the fact that the *Amick* Patent and Application are creating one of a kind applications and utilizing frequency and cadence detection, the Objects would not be the same. These customer specific applications are created, manipulated and destroyed utilizing preprogrammed Objects/Software Constructs first disclosed in the *Amick* Patent, which were incorporated in full, and are further described, in the *Amick* Application.

10 Comparison of Claims 32 through 82 with the *Sand*, *Shaffer* and *Bjornberg* Patents

(a) *Sand* Document Number 5,459,780

In the abstract, *Sand* discloses an arrangement for providing Automatic Call Distribution (ACD) service from a mixture of local and remote agents in which the
15 remote agents are connected via a voice connection to the home switch of the ACD and voice data connection to a Home Agent Server.

The *Amick* Application discloses systems and methods for the rapid and accurate creation of customer specific applications that may mirror part or all of a client's physical communications structure. These are two totally different endeavors.

20 In *Sand* document number 5,459,780 (hereinafter called "*Sand*"), a connection is established between the home switch of the ACD and voice data connection to a Home Agent Server and the statement is made: Call set-up time is reduced by establishing longer term connections between the ACD and the remote server and using

these connections for a plurality of calls; such connections are established or disconnected when the traffic level suggests the desirability of having more or fewer remote servers.

Unlike *Sand*, the *Amick* Application discloses systems and methods for the
5 creation of applications that utilize the CALL PULLBACK technology as disclosed in the *Amick* Patent, and blind transfers to transfer calling parties to called parties. In the event of no answer/error conditions, callers are offered options based on the design of the customer specific application. These customer specific applications are created, manipulated and destroyed utilizing preprogrammed Objects/Software Constructs first
10 disclosed in the *Amick* Patent, which were incorporated in full, and are further described, in the *Amick* Application.

(b) *Shaffer* Document Number 5,905,776

Shaffer document number 5,905,776 (hereinafter "*Shaffer*") discloses the
15 use of a system and method of providing site-to-site compatibility of telecommunications stations which allow users to transparently relocate among a number of different stations, while the apparent locations of the users remain fixed as well as the use of station-based coordinator modules to provide automated routing to the station at which the particular individual is located, while leaving the apparent location of the user fixed at a designated
20 station of the PBX. In the preferred embodiment it is stated that the coordinator modules may be located on line cards of the PBX.

The *Amick* Application discloses systems and methods for the creation of applications that utilize CALL PULLBACK technology as disclosed in the *Amick* Patent

and blind transfers to transfer calling parties to called parties. In the event of no answer/error conditions, callers are offered options based on the design of the customer specific application. These customer specific applications are created, manipulated and destroyed utilizing preprogrammed Objects/Software Constructs first disclosed in the

5 *Amick* Patent, which were incorporated in full, and are further described, in the *Amick* Application.

(c) *Bjornberg et al* Document Number 6,647,111

Bjornberg et al document number 6,647,111 (hereinafter called

10 “*Bjornberg*”), discloses the use of individual service-independent building blocks (SIBBs) that allow the creation of customer applications with branching available.

The *Amick* Patent, issued July 11, 2000, over three years earlier, discloses that the signaling attributes and customer-specific information are controlled by Objects, which are well thought out preprogrammed and proven Objects/Software Constructs that

15 simplify programming and ensure reliable operations. The calling party is kept on soft hold while the intended recipient of the call is attempted to be contacted at the different locations. If the CALL PULLBACK mechanism determines that the signals provided by the local telephone equipment, after being normalized, indicate the intended recipient does not pick up the call, the CALL PULLBACK mechanism attempts to reach the

20 intended recipient at another one of the numbers, all the while the calling party is kept on soft hold. In this way, the global Virtual Network Call Processor is capable of servicing not only individuals and companies serviced by a single PBX with a call processor but also for any number of other users not serviced by the PBX.

These customer specific applications are created, manipulated and destroyed utilizing preprogrammed Objects/Software Constructs first disclosed in the *Amick* Patent, which were incorporated in full, and are further described, in the *Amick* Application.

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Examiner's Paragraph 32:

At the time of the issuance of the *Amick* Patent, which is incorporated in full in the *Amick* Application, the examiner found that "prior art of record fails to teach, or render obvious, alone or in combination, a virtual network call processing system and a
10 method for processing calls in the virtual network call processing system comprising a central office switch characterization mechanism that characterizes signaling attributes of signals produced by one of a plurality of central office switches, each having a different frequency and cadence signal event characteristic."

The *Amick* Application incorporates in full the *Amick* Patent because it requires
15 the invention disclosed therein in order to function and cannot function on its own, independently. At the time of filing the issued patent, Amick hired a full time employee to research whether there was prior art of record or other inventions that utilized the concept of creating applications that mirrored a customer's communications network. That employee spent over a year performing that function. There is no question that there
20 were no similar inventions or prior art of record that performed the functions of the *Amick* Application at the time said Application was filed. There were businesses that resold long distance at a much higher cost because they added the ability for the caller to leave a voice mail message. After the filing of the *Amick* Application, simple menu

structures and the dialing of pagers and blind transfers were used. No one utilized CALL PULLBACK functionality like that disclosed in the *Amick* Patent. Until Amick created the first Objects, it was not cost effective to create complex custom one of a kind applications for each customer, which is why there was no prior art in existence.

5 The Objects/Software Constructs would not function independently of the previous invention of CALL PULLBACK, which is the subject matter of the *Amick* Patent, because the information that was needed to make the Objects/Software Constructs function properly was available only to carriers in the SS7 signaling network and was not available to Amick or his customers. The CALL PULLBACK system was used as a
10 substitute for the SS7 signaling network in order to create customer specific applications under the control of Objects/Software Constructs first disclosed in the *Amick* Patent, which were incorporated in full, and further described, in the *Amick* Application.